

CLAIMS

What is claimed is:

1. In a toilet of the type having a trapway, the trapway extending between a bowl opening and an outlet, 5 the trapway having a curved water dam region extending from the bowl opening to above the bowl opening to a down leg, the improvement comprising:

the down leg slopes in a rearward direction from its top to an essentially horizontal baffle extending forward 10 from a rear wall of the down leg adjacent a lower portion of the down leg, the lower portion of the down leg being linked to an out leg communicating with the outlet.

2. The toilet of claim 1, wherein the trapway has a circular cross-section throughout the curved water dam 15 region.

3. The toilet of claim 1, wherein the curved water dam region includes a dam down leg radius adjacent the down leg between about 1.5 and 4.0 inches.

4. The toilet of claim 3, wherein the dam down leg 20 radius is between about 2.25 and 3.5 inches.

5. The toilet of claim 1, wherein the out leg is essentially horizontal.

6. The toilet of claim 5, wherein at least a portion of the out leg is straight.

25 7. The toilet of claim 1, wherein the baffle has a ledge length of between about 0.5 and 2.5 inches measured from the rear wall of the down leg.

8. The toilet of claim 7, wherein the ledge length is between about 0.7 and 1.5.

30 9. The toilet of claim 1, wherein the baffle has a ledge height of between about 1.5 and 3.0 inches measured from a bottom of the out leg.

10. The toilet of claim 9, wherein the ledge height is between about 1.75 and 2.5 inches.

35 11. The toilet of claim 1, wherein at least a portion of the down leg is straight.

12. The toilet of claim 1, wherein the down leg slopes less than 15 degrees from vertical.

13. The toilet of claim 12, wherein the down leg slopes between about 1 and 8 degrees from vertical.

5 14. The toilet of claim 1, wherein the trapway has a minimum ball passage of about 2 inches.

15. The toilet of claim 1, wherein the up leg has a circular cross-section.

10 16. The toilet of claim 1, wherein the up leg has a flat interior wall.

17. The toilet of claim 1, wherein the out leg has a circular cross-section.

18. The toilet of claim 1, wherein the out leg has a flat interior wall.

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